

C1111 ABS MOTOR, MOTOR RELAY SYSTEM

Description

1).PUMP

The pump returns the brake fluid stored in the reservoir to the master cylinder by reducing the pressure.

2).MOTOR

The motor drives the pump according to the signals transmitted by the ABS actuator and electric unit (controlunit).

3).MOTOR RELAY

Activates or deactivates motor according to the signals transmitted by the ABS actuator and electric unit (controlunit).

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1111	PUMP MOTOR	During the actuator motor operating with ON, when the actuator motor turns OFF, or when the control line for actuator motor relay is open.	<ul style="list-style-type: none"> • Harness or connector • ABS actuator and electric unit
		During the actuator motor operating with OFF, when the actuator motor turns ON, or when the control line for relay is shorted to ground.	

DTC CONFIRMATION PROCEDURE

1).Turn the ignition switch ON.

2).Perform ABS actuator and electric unit (control unit) self-diagnosis.

3).Is DTC "C1111" detected?

YES >> Proceed to diagnosis procedure.

NO >> INSPECTION END

Diagnosis Procedure

1).CHECK CONNECTOR

- A).Turn the ignition switch OFF.
- B).Disconnect ABS actuator and electric unit (control unit) connector.
- C).Check terminal for deformation, disconnect, looseness, etc.
- D).Is the inspection result normal?
 - YES >> GO TO 2.
 - NO >> Replace or repair damaged parts.

2).CHECK ABS MOTOR AND MOTOR RELAY POWER SUPPLY CIRCUIT

- A).Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.
- B).Is the inspection result normal?
 - YES >> GO TO 3.
 - NO >> Repair or replace damaged parts.

3).CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) GROUND CIRCUIT

- A).Check the continuity between ABS actuator and electric unit (control unit) harness connector and ground.
- B).Is the inspection result normal?
 - YES >> Replace ABS actuator and electric unit (control unit).
 - NO >> Repair or replace damaged parts. (Check ABS earth bolt for tightness and corrosion.)

Component Inspection

1).CHECK ACTIVE TEST

- A).On "ACTIVE TEST", select "ABS MOTOR".
- B).Touch "On" and "Off" on screen. Make sure motor relay and actuator relay operates as shown in table below.
- C).Is the inspection result normal?
 - YES >> INSPECTION END
 - NO >> Proceed to diagnosis procedure.

Special Repair Requirement

1).ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION, CALIBRATION OF YAW RATE/SIDE/DECEL G SENSOR AND CALIBRATION OF PRESSURE SENSOR

- A).After removing/replacing an ABS actuator and electric unit (control unit), be sure to perform the following procedure.